- 1. If  $Sin A = \frac{4}{5} and Sin B = \frac{5}{13}$ , then Sin (A+B) = ?
  - A.  $\frac{63}{65}$
- B.  $\frac{16}{65}$
- C.  $\frac{33}{65}$
- D. 65
- 2. Function of control rod (rods of cadmium) in a nuclear reactor is to
  - A. Absorb excessive heat produced during fission reaction and thus prevents excess rise of temperature.
  - B. Absorb the excess neutrons so as to control the chain reaction.
  - C. Decrease the energy of neutrons so that they can be further use for fission reaction.
  - D. Generate neutrons required for chain fission reaction.
- 3. Term AAU refers to Assigned Amount Units which caps the \_\_\_\_\_
  - A. Emission of carbon
  - B. Emission of greenhouse gases
  - C. Selling of carbon credits
  - D. Savings in terms of carbon footprints
- 4. In a certain code language, if TEMPLE is coded as 187658 and CHURCH is coded as 439243,then PURE will be coded as?
  - A. 6928
- B. 3982
- C. 6982
- D. 9682
- 5. The value of  $\frac{0.55 \times 0.81}{4.5}$  =?
  - A. 0.99
- B. 0.099
- C. 9.9
- D. 0.0099
- 6. What is the objective of "SAMANVAY" portal launched by Ministry of Rural Development?
  - A. Facilitate enrolment under Social Security Scheme.
  - B. Promote bank finance for Start-ups (an entrepreneurial venture)
  - C. Monitor progress & implementation of the Sansad Adarsh Oram Yojana.
  - D. Monitor progress & implementation of "Pradhan Mantri Jan-Dhan Yojana"

- 7. Which Act provides for acquisition & loss of citizenship after the commencement of the constitution?
  - A. The Citizenship Act, 1950
  - B. The Citizenship Ad, 1952
  - C. The Citizenship Act, 1955
  - D. The Citizenship Ad, 1954
- 8. Mr. Ranjan browed Rs.7,500 at 4% per annum compound interest. The compound interest compounded annually for 2 years is:
  - A. 612
- B. 8112
- C. 8121
- D. 621
- 9. A disorder when one cannot see the distant clearly is known as?
  - A. Hypermetropia
- B. Night blindness
- C. Myopia
- D. Strebismus
- 10. Sepoy Mutiny started in 1857 at\_\_\_\_\_
  - A. Agra
- B. Meerut
- C. Lucknow
- D. Aligarh
- 11. Convert 29 to binary.
  - A. 10101
- B. 11110
- C. 11101
- D 11001
- 12. Name the monument which includes animpressive series of nine Hindu temples, as well as a Jain sanctuary with one masterpiece, the temple of Virupaksha and is located in Bagalkot, Karnataka?
  - A. Group of monuments at Mahahalipuram
  - B. Group of monuments at Hampi
  - C. Group of monuments at Pattadakal
  - D. Khajuraho Group of monuments
- 13. Given k = -3. Find the value of  $k^3 + 3k$ .
  - A. -36 B. 36
- C. 37 D. -37
- 14. A tube has two punctures. The 1<sup>st</sup> hole alone makes the tube empty m 29 minutes and 2<sup>nd</sup> hole alone makes the rube empty in 6 minutes. If air leaks out at a constant rate, how long in minutes does it take if both the holes together empty the tube?

34	34	33 3
A. $\frac{37}{25}$	B. $3\frac{34}{35}$	C. $4\frac{35}{35}$ D. $4\frac{3}{3}$
35	35	C. 1 <sub>35</sub> 3

- 15. Match the following:
  - a) Input device
- p) ROM
- b) Processing device
- q) Touch screen
- c) Storage device
- r) Printer
- d) Output device
- s) Flash Memory
- A. a-q, b-s, c-r, d-p
- B. a-q, b-p, c-s, d-r
- C. a-r, b-p, c-s, d-q
- D. a-p, b-q, c-r, d-s
- 16. If in a certain language, CHILLY is coded as HCLIYL, how is MANURE coded in that code?
  - A. AMREUN
- B. AMUNER
- C. ARMUEN
- D. ENARMU
- 17. Who has won a gold medal in 7th World Bodybuilding and Physique Championship (WBPF) held at Bangkok?
  - A John Michael Conlan
  - B. Yunfei Li
  - C. Tfaakur Anoop Singh
  - D. Shiva Thapa
- 18. In the year 2009, TerreStar-1 launched for better communication to North America. From which country it was launched?
  - A. France
- B. USA
- C. China
- D. Russia
- 19. Name the Indian music maestro who haj teen named as the
  - A. Sonu Nigam
- B. A.R. Rahman
- C. Ilaiyaraaja
- D. Ravi Shankar
- 20. Which of the following is not an Input device?
  - A. Web Camera
- B. BCR
- C. Digitizer
- D. Processor
- 21. Only those metals can displace hydrogen from water which are in the reactivity series of metals.
  - A. Below hydrogen
  - B. Above hydrogen
  - C. Either above or below

- D. Metals can't displace hydrogen from water.
- 22. is the largest tiger reserve in India.
  - A. Jim Corbett Tiger Reserve
    - B. Sunderbans Tiger Reserve
  - C. Satpura Tiger Reserve
  - D. Nagarjunsagar-Srisailam Tiger Reserve
- 23. Rajdhani train starts from city Delhi. The number of women in the train is half of the number of men. In city Faridabad, 10 men leave the train and five women enter. Now number of men and women is equal. In the beginning, how many passengers entered the train?
  - A. 25 B. 35
- C. 45 D
- D.55
- 24. The angle subtended by an arc at the center of a circle is \_\_\_\_\_the angle subtended by it at the circumference.
  - A. Equal
- B. Thrice
- C. Twice
- D. Half
- 25. Divide Rs.198 in the ratio 2:3:5.8. The rupees in the respective ratios are given by:
  - A. 22, 33, 54 & 89
- B. 22,33, 56 & 87
- C. 22, 33, 55 & 88
- D. 22, 34, 54 & 88

# 26. Read the statements and select a conclusion from die given alternatives:

#### **Statement:**

State Government has agreed in principle to sanction more numbers of posts of secondary school teachers in rural and urban areas to improve the teacher-student ratio.

## **Conclusions:**

- I. Student-teacher ratio in urban areas is higher than that of rural areas
- II. Student-teacher ratio in rural areas is higher than that of urban areas.
- A. Only conclusion I follows.
- B. Only conclusion II follows.
- C. Either I or II follows.
- D. Neither I nor II follows.

# **Comprehension:**

Answer the questions based on the following information:

Six friends Prem, Qazi, Ritvik, Sunny, Tinu and Utkarsh are sitting around the hexagonal table each at one comer and are facing the centre of the hexagonal. Prem is second to the left of Utkarsh. Qazi is neighbour of Ritvik and Sunny. Tinu is second to the left of Sunny.

**Sub-Question No: 27** 

27. Who is sitting opposite to Tinu?

A. Ritvik

B. Qazi

C. Prem

D. Sunny

## **Comprehension:**

Answer the questions based on the following information:

Six friends Prem, Qazi, Ritvik, Sunny, Tinu and Utkarsh are sitting around the hexagonal table each at one comer and are facing the centre of the hexagonal. Prem is second to the left of Utkarsh. Qazi is neighbour of Ritvik and Sunny. Tinu is second to the left of Sunny.

**Sub-Question No: 28** 

28. Who is the fourth person to the left of Qazi?

A. Prem

B. Utkarsh

C. Ritvik

D. Sunny

#### **Comprehension:**

Answer the questions based on the following information:

Six friends Prem, Qazi, Ritvik, Sunny, Tinu and Utkarsh are sitting around the hexagonal table each at one comer and are facing the centre of the hexagonal. Prem is second to the left of Utkarsh. Qazi is neighbour of Ritvik and Sunny. Tinu is second to the left of Sunny.

**Sub-Question No: 29** 

- 29. Who of the following are the neighbors of Prem?
  - A. Utkarsh and Sunny
  - B. Tinu and Ritvik
  - C. Utkarsh and Ritvik
  - D. Tinu and Utkarsh
- 30. Aluminium objects like pressure cookers, saucepans etc. are anodised
  - A. To increase their conductivity.
  - B. To increase their tensile strength.
  - C. To protect them against corrosion.
  - D. To make them light and more shining.

31. Ritvik said to a lady, "Your mother's husband's sister is my aunt" How is the lady related to Ritvik? Choose from the given options.

A. Daughter

B. Grand Daughter

C. Mother

D. Sister

32. The only phenomenon which proves that light is a transverse wave is

A. Scattering of light

B. Interference

C. Diffraction

D. Polarisation

**33. Direction:** Rend the statements and select a conclusion from the given alternatives:

## **Statements:**

All radish are white.

Some white are pink.

Some pink are yellow.

No yellow is cabbage.

## **Conclusions:**

I. No cabbage is pink, n. Some pink arc radish.

II. Some cabbage are radish.

IV. Some cabbage are pink

A. Only I and II follow

B. Either I or IV follows

C. Only I and either III or IV follow

D. Only I, II and either III or IV follow

34. Introducing Nitin to her husband, a woman said, "his brothel's father is the only child of my grandfather" How is the woman related to Nitin?

A. Mother

B. Aunt

C. Sister

D. Daughter

35. What is the Risk coverage (sum assured) under the "Pradhan Mantri Suraksha Bima Yojana"?

A. Rs.2 lakhs

B. Rs.1 lakh

C. Rs.1.5 lakhs

D. Rs.2.25 lakhs

36. Simplify: 3(x-2)-(x-2),

A. 2x + 8

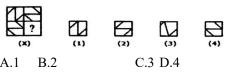
B. -2 + 4

C. 2x + 4

D. 2x - 4

37. Complete the Figure X from the 4 alternatives 1, 2, 3, 4





## **Comprehension:**

#### Study the graph and answer the following questions:

Out of the two bar graphs provided below, one shows the amounts (in Lakh Rs.) invested by a Company in purchasing unprocessed materials over the years and the other shows the values (in Lakh Rs.) of processed goods sold by the Company over the years.





# **Sub-Question No: 38**

What was the difference between the average 38. amount invested in unprocessed materials during the given period and the average value of sales of processed goods during this period?

A. Rs.62.5 lakhs

B. Rs.68.5 lakhs

C. Rs.71.5 lakhs

D. Rs.77.5 lakhs

#### **Comprehension:**

# Study the graph and answer the following questions:

Out of the two bar graphs provided below, one shows the amounts (in Lakh Rs.) invested by a Company in purchasing unprocessed materials over the years and the other shows the values (in Lakh Rs.) of processed goods sold by the Company over the years.





## **Sub-Question No: 39**

39. The value of sales of processed goods in 1999 was approximately what percent of the sum of amount invested in unprocessed materials in the years 1997, 1998 and 1999?

A. 33%

B. 37%

C. 45%

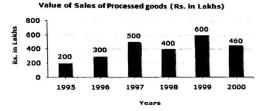
D. 49%

# Comprehension:

# Study the graph and answer the following questions:

Out of the two bar graphs provided below, one shows the amounts (in Lakh Rs.) invested by a Company in purchasing unprocessed materials over the years and the other shows the values (in Lakh Rs.) of processed goods sold by the Company over the years.





#### **Sub-Ouestion No: 40**

40. In which year, the percentage (compared to the previous year) in the investment on unprocessed material is same as that in the value of sales of processed goods?

A. 1996

B. 1997

C. 1998

D. 1999

41. Find the HCF of 27, 18, 45, 81.

A. 9 B. 6 C. 3 D. 18

42. Read the statements and select a conclusion from the given alternatives:

#### **Statements:**

The use of renewable source of energy will eliminate the energy crisis in the world.

## **Conclusions:**

- I. Modern technology is gradually replacing the non-renewable source of energy.
- II. The excessive exploitation of environment has led to the depletion of non-renewable sources of energy.
- A. Only conclusion I follows.
- B. Only conclusion II follows
- C. Either 1 nor II follows
- D. Neither I nor II follows
- 43. Tungabhadra multipurpose project is established on the tributary of which of the following rivers?

A. Godavari

B. Krishna

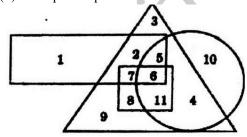
C. Mahanadi

D. Indus

#### **Comprehension:**

# Study the figure and answer the following questions:

- (1) The rectangle represents software employees.
- (2) The triangle represents rural people.
- (3) The circle represents post graduates.
- (4) The square represents PO.



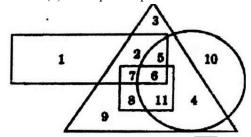
# **Sub-Question No: 44**

- 44. Which of the following statements is hue?
  - A. All rural people are post graduates.
  - B. Some PO are software employees but not rural.
  - C. All software employees are PO.
  - D. Some rural people are not post graduates.

## **Comprehension:**

Study the figure and answer the following questions:

- (1) The rectangle represents software employees.
- (2) The triangle represents rural people.
- (3) The circle represents post graduates.
- (4) The square represents PO.



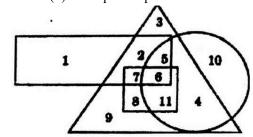
## **Sub-Question No: 45**

- 45. Choose the correct statement:
  - A. Some PO are software employees.
  - B. No PO is rural.
  - C. All post graduates are rural.
  - D. All post graduates are software employees.

## **Comprehension:**

# Study the figure and answer the following questions:

- (1) The rectangle represents software employees.
- (2) The triangle represents rural people.
- (3) The circle represents post graduates.
- (4) The square represents PO.



## **Sub-Question No: 46**

- 46. Which of the following statements is true? 6
  - A. All software employees are PO.
  - B. Some software employees are post graduates as well as PO.
  - C. All software employees are post graduates.
  - D. All PO are software employees but not post graduates.

### 47. Consider the following information:

P means "multiplied by", T means "minus", M means "added to" and B means "divided by", then find the value of **28 B 7 P 8 T 6 M 4**.

A. 30

B. 32

C. 34

D. None of the above

48. Mr. Vageesh invested money in FD. How much will he get on maturity, if Rs.1500 is invested at 20% per annum compound interest for 6 months, compounded quarterly?

A. 4961.5

B. 4961.25

C. 4961.35

D. 4961

49. Ryder Cup is associated with which of the following sports?

A. Cycling

B. Horse racing

C. Golf

D. Snooker

50. If Cot  $x = \frac{5}{12}$ , then Sinx - Sec x = ?

A.  $-\frac{229}{65}$ 

B.  $\frac{229}{65}$ 

C.  $\frac{109}{65}$ 

D.  $-\frac{109}{65}$ 

51. Four pair of words are given below out of which three are alike in some manner and one pair is different. Which pair is different from the rest?

A Bottle: Wine

B. Cup: Ten

C. Pitcher: Water

D. Ball: Bat

52. The mean of first 10 natural numbers is:

A 6.5 B. 5.5

C. 7.5 D. 8.5

53. Which International airport became foe world's first airport to operate completely on solar power?

A Trivandrum International Airport

B. Cochin International Airport

C. Goa International Airport

D. Amritsar International Airport

54. If in a certain language, STABLE is coded as TSBAEL, how is SCARCE coded in that code?

A. CSRAEC

B. ACSRAC

C. CASARC

D. ARCCAS

55. Mr. Rithul sold a bus forRs.1870 with a loss of 15%. At what price should the bus be sold to get a profit of 15%?

A. 2560

B. 2550

C. 2540

D. 2530

56. The cash difference between the selling price of an article at a profit of 8% and 18% is Rs.3. The ratio of two selling prices is:

A. 54:59

B. 54:61

C. 59.61

D. 53.59

57. Pointing out to a lady. Urmi said, "she is the daughter-in-law of the grandmother of my father"s only son". How is the lady related to Urmi? Choose from the given options.

A. Sister-in-law

B. Mother

C. Sister

D. Mother-in-law

58. Two jeeps start from a house with a speed of 20 km/hr at interval of 10 minutes. With how much more speed (km/hr) the woman coming from the opposite direction towards the house has to travel to meet the jeeps at an interval of 6 minutes

A. 13

B.  $13\frac{2}{3}$ 

C. 13 <sup>1</sup> <sub>2</sub>

D. 13.5

59. A shopkeeper cheats to the extent of 25% while buying and selling fruits, by using tampered weights. His total gain in percentage is.

A. 55.25

B. 56.25

C. 56.75

D. 56.5

60. Name the Sarangi maestro who has passed away on 1st December 2015?

A. Ustad Sabri Khan

B. Pandit Ram Narayan

C. Ustad Sultan Khan

D. Dhruba Ghosh

61. Solve for x: -x - 4 = -3

A. 7 B. -1

C. -7 D. 1

62. Four pair of words are given below out of which three are alike in some manner and one pair is different. Which is different from the rest?

A. Principal: School

B. Soldier; Amy

C. Artist: Troupe D. Singer: Chorus C. Offices of the President & Vice-President D. Election to the Panchayats. 63. on 12 May 2015 became Indian-Origin the first Asian woman to be elected as mayor 70. When was the PSLV used in India for the first in the United Kingdom (UK). time? A. Ranjit Kaur Dheer A. 1980 B. 1987 B. Inderjeet Singh C. 1994 D.2000 C. SukhwinderKaur Note: For this question, discrepancy is found in question/answer. So, Th is question is D. Harbbajan Kaur Dheer ignored for all candidates. 64. Shivangi takes 6 hrs 15 minutes in walking a 71. Which stage of vehicle emission norms is distance and riding back to same place where presently applicable in India? she started. She could walk both ways in 7 hrs A. Bharat I B. Bharat II D. Bharat IV 45 minutes. The time taken by her to ride back C. Bharat III both ways is: LCM of <sup>2</sup>, <sup>20</sup>, <sup>4</sup>, <sup>8</sup> A. 4 hrs 45 mm B. 4 hrs 15 min 72. 30 40 50 C. 4 hrs 25 min D. 4 hrs 35 min Compute:  $5886 \div 654 - 3$ A. 300 65. B.  $\overline{10}$ B. 6 A. -6 D. 4 C. C.  $\frac{1962}{217}$ 73. India has developed the first vaccine for blue tongue disease mainly found in: 66. **Consider the following information:** A. Chicken B. Dogs '<means ,,minus', ,,<means ,,plus", ,,=" means C. Sheep and Goats D. Monkeys 'multiplied by" and "\$" means "divided by", then find the value of 27 > 81 \$ 9 < 6. 74. A square has diagonals of length 26 cm, then A. 6 B 30 C. 38 D. 64 the sides of the square in cm is. A. 13 2 B. ±13 2 Ullas is twice as good as salesman as Tejas 67. D. 26  $\bar{2}$ C. 13 and together they finish a piece of work in 18 The variance of a set of data is 81. Then the 75. days. In how many days will Tejas alone finish standard deviation of the data is: the work? C. 81 D. 40.5 A. ±9 B. 9 C. 20 D. 72 A 36 B. 54 \_was the world's first artificial satellite. 76. Complete the Figure X from the given 68. A. Apollo 11 B. Sputnik 1 alternatives 1,2,3,4 C. Sputnik 0 D. GSAT 77. Zoroastrian is an Indian religion mainly found in the state of: (1) (2) (3) (4) A. Maharashtra B. Haryana C. Bihar D. Kerala A. 1 B. 2 C. 3 D. 4 78. Who is credited with the invention of the 69. The Election Commission of India is not

election

responsible

A. LokSabhaB. State Legislature

for

processes to which of the following?

administering

World Wide Web?

A. Tim Berners-Lee

C. Allen B Dumont

B. John Napier

D. J.P.Eckert

79.		a's first publicly screened						
	cinema RajaHarisho		88.	Ramakrishna Mission was formed by				
	A. V G Damle	B. V Shantaram		A. Swami Vivekananda				
	C. Bimal Roy	D. Dada Saheb Phalke		B. Sri Ramakrishna				
				C. Swami Dayanand	Saraswati			
80.	Which district of	India has become the first		D. Raja Ram Mohan	Roy			
		to have high speed Rural						
	Broadband Networl	x under NOFN?	89.	Who in Tennis is nic	knamed as "can"t-miss-			
	A. Bhopal	B. Chennai		Swiss"?				
	C. Idukki	D. Mysore		A. SaniaMirza	B. Maria Sharapova			
81.	Two watches were	sold for Rs.850 each. One		C. Martina Hingis	D. Serena Williams			
	at a loss of 15% an	d other at a profit of 1598.						
	Find gam/loss%.		90.	Which of the following	ing is NOT included in the			
	A. No Gain - No los	ss		list of "UNESCO We	orld Heritage Sites"?			
	B. Loss, 2.25%			A.Kaziranga Nationa	al Park			
	C. Gain, 2.25%			B.ChhatrapatiShivaji	i Terminus			
	D. Loss, 2%			C.Keoladeo National	l Park			
				D.The Leaning temp	le of Huma			
82.	is a device that converts one form of			Read the statement	and select a conclusion			
	energy to other, usually a signal in one form of			from the given alternatives:				
	energy to signal			Statement: In this co	entury, no nation is			
	A. Transmitter	B. Amplifier		absolutely independe	ent.			
	C. Transducer	D. Repeater		Conclusions:				
				I. It is impossible to	grow and produce all that			
83.	When was India's fi	When was India's first aircraft carrier INS			a Nation needs.			
	Vikrant decommissioned from Defence'"			II. Nation's men in general have become laz				
	A.1997	B. 1992		A. Only conclusion I follows				
	C. 2004	D. 2000		B. Only conclusion II follows				
84.		en find the value of x.		C. Either I or II follows				
	A. 10	B. 50		D. Neither I nor II fo	llows			
	C. 100	D. 25						
85.		e area of a cone where "r"	92.	Jhelum, Chenab and	Ravi are the tributaries of:			
	is radius and "l" is s		-	A. Ganga River				
	A. $\pi r (1+r)$	B. 2πr (l+r)		B. Indus River				
	C. πrl	D. $2\pi rl^2$		C. Brahmaputra Rive	er			
86.	The factors of $x^2 - 2$			D. Godavari River				
00.	A. $(x+5)(x-3)$	B. (x-5) (x-3)		D. Godavan naver				
	C. $(x-3)(x-1)$	D. $(x-5)(x+3)$	93.	If in a certain langu	age, REPAIR is coded as			
	C. (A 3) (A 1)	$\mathcal{D}$ . (A 3) (A·3)	,,,,		ESULT coded in that code			
87.	Rased on the follo	owing information, answer		?	SOLI COUCU III MAN COUC			
07.	the following questi	_		A. TLERSU	B. ERUSTL			
	<b>U</b> 1	1,2,3,4,5,6, 7,8 and 9 is		C. TRLESU	D. RTLESU			
		s,t, u, v, w,x and y		C. TREESU	D. KILLSU			
	respectively.	s,, u, v, w, allu y	94.	Lord Gulamkadarh	hoy Noon was a British			
	qtt+uv – (rpw) is eq	uual ta	7 <del>1</del> .		Mumbai, India who died			
					5 is famous as			
	A. pv	B. vp		A. Curry King				
	C. uv	D. Up		A. Curry Killig	B. Masala King			

C. Taste King D. Food King A. Maharashtra B. Kerala C. Bihar D. Rajasthan 95. A. 1-2-3-4 B. 2-4-3-1 The ratio between two numbers 2:3 and their sum is 420, find the smaller number. C. 1-3-2-4 D. 2-4-1-3 A. 84 B. 168 C. 252 D. 200 99. The initiative "Anticipate, Absorb, Reshape" 96. The Ajanta Caves which are about 30 rock-cut to build climate resilience m (be world's most Buddhist caves described as "the finest vulnerable country has been launched by \_\_\_\_\_ surviving examples of Indian art, particularly A. World Trade Organization painting" is located in\_ B. United Nations A. Amaravathi, Maharashtra C. World Meteorological Organization B. Aurangabad, Maharashtra D. UNESCO C. Pune, Maharashtra Calculate the amount after 3 year if Rs.5000 is D. Ratnagiri, Maharashtra 100. invested at 10% per annum compound interest B. 6500 97. Where is ISRO"s rocket launching pad located A. 6655 C. 6600 D. 6800 in India? B. Trombay A. Sriharikota C. Bangalore D. Mysore 98. Arrange the following states as per their current population in ascending order. ANSWER KEY

1.	A	2. B	3. B	4. A	5. B	6. C	7. C	8. A	9. C	10. B
11.	C	12. C	13. A	14. D	15. B	16. B	17. C	18. A	19. B	20. D
21.	В	22. D	23. C	24. C	25. C	26. D	27.B	28. A	29. B	30. C
31.	D	32. D	33. B	34. C	35. A	36. D	37. A	38. D	39. D	40. B
41.	A	42. D	43. B	44. D	45. A	46. B	47. A	48. B	49. C	50. D
51.	D	52. B	53. B	54. A	55. D	56. A	57.B	58. C	59. B	60. A
61.	В	62. A	63. D	64. A	65. B	66. B	67.B	68. A	69. D	70. 0
71.	D	72. D	73. C	74. A	75. B	76. B	77. A	78. A	79. D	80. C
81.	В	82. C	83. A	84. A	85. A	86. D	87. B	88. A	89. C	90. D
91.	A	92. B	93. B	94. A	95. B	96. B	97. A	98. B	99. B	100. A